



# SPAN FORGING PVT. LTD.

Manufacturers of : Steel Forging, CNC Turned Components & Gears

Works : Village - Tatarpur (Near Prithla) Teh. Palwal, Distt. Faridabad, Cell : 9810010535

Ref. No. ....

Date.....

## TEST REPORT

Issued to: M/sNov Sara India Pvt.Ltd. 7/1,Pritam Road,Unit-II Dehradun-248001	Report No. 507	D.O.T. 21-06-2011
Sample Description T.S.	Sample No. 6268	Heat No. R-575
		D.O.R 20-06-2011

## RESULTS

Chemical Analysis  
By Spectrometer

Sample ID

J.O No.

<u>Element</u>	<u>%</u>
Carbon	0.0592
Silicon	0.506
Sulphur	0.0144
Phosphorus	0.0346
Manganese	1.46
Nickel	10.08
Chromium	16.3
Molybdenum	2.08
Vanadium	0.0608
Copper	0.369
Tungsten	0
Cobalt	0.181
Aluminium	0.0097
Titanium	0.0177
Iron	68.70

Autorised Signatory  
(Q.M / T.M )

Checked By  
Arun Mishra

1. The result listed refer only to the tested samples and applicable parameters. Endorsement of product is neither inferred nor implied.
2. Total Liability of our Laboratory is limited to the invoiced amount. No liability will be accepted after the sample is taken back.
3. The report can not be used as an evidence in a court of law.
4. Samples will be destroyed after 15 days.
5. Any Complaints about this report should be communicated within 7 days of issue of this report.
6. This report shall not be reproduced except in full, without the written permission of the Laboratory.
7. \*Not Covered under NABL Scope.



# PARVATI LTD.

Regd Office & Works : 27, Rajasthani Udyog Nagar, G. T. Karnal Road,  
NEW DELHI - 33, Phone : 91 - 11 - 27691481, 1282, 1283 Fax : 91 - 11 - 27691909

## TEST CERTIFICATE

Customer Name & Destination :  
**M/S NOV SARA INDIA(P)LTD.** T.C.NO.:P-853 Date : 12.03.11 ORDER NO : VERBAL

Material Specification	Manufacturing Route	Supply Condition	Size	PCS	Colour Code	Weight (Mt)
AISI-304	INDUCTION FURNACE	AS ROLLED	40 MM	107	PINK	55.30
AISI-316			56 MM	53	PINK	53.90
			70MM	23	BLUE	39.50

### CHEMICAL ANALYSIS IN PERCENTAGE

ELEMENTS		C	Mn	Si	S	P	Cr	Ni	Mo	N	COLO UR	CODE	Size	Pcs.
Specification	Min.													
	Max.													
Heat No.	Grade													
R-573	AISI-304	.074	1.49	.51	.017	.030	18.12	8.08		.0642			40 MM	107
R-574	AISI-304	.072	1.53	.53	.013	.034	18.09	8.11		.0704			56 MM	53
R-575	AISI-316	.070	1.47	.52	.014	.034	16.71	10.06	2.03	.0682			70 MM	23

ULTRASONIC TESTING  
ACC. STD : 6mm FBH

REMARKS : NA

### MECHANICAL PROPERTIES : TEST STD ASTM A370

SPEC	Test Condition	UTS (N/MM <sup>2</sup> )	YS (N/MM <sup>2</sup> )	% EL	% RA	Hardness (BHN)	
						Min.	Max.
RESULT	-	-	-	-	-		

### METALLURGICAL TEST RESULT

Grain Size  
E 112

### IMPACT TESTING :

Test Temp : Test Std :

Sr. No	Impact Energy (J)	Average
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### INCLUSION RATING ASTM E - 45

	A	B	C	D			1	-	-
Thin	-	-	-	-			2	-	-
Thick	-	-	-	-			3	-	-

### JOMINY HARDENABILITY : ASTM - 3848

### MACROSTREAK FLAW TEST (IS - 4075)

DIST mm/Inch	J	J	J	J	J	Marco Test (ASTM E - 381)	1 <sup>st</sup> Step	2 <sup>nd</sup> Step	3 <sup>rd</sup> Step
ACTUAL HRC									

### Visual Inspection :

#### Remarks

- Impact testing as per dinen 10015 - 1
- Ultrasonic testing as per astm a 388
- Material is free from residual radioactive elements.
- Lead not added during manufaturin.
- Steel has been manufactured in mercury free environment.

For Parvati Ltd.

WE CONFIRM THAT THE TEST  
CERTIFICATE FINDINGS ARE  
CORRECT & RESULTS ARE  
AS PER STANDARD /  
CUSTOMER'S REQUIREMENTS

Chemist

For Parvati Ltd.

Parvati Limited  
Delhi  
Authorized Signatory (Q.C.)